

## Huntington Power Plant

6 miles west of Huntington, Utah on Hwy. 31  
P.O. Box 680  
Huntington, Utah 84528

April 18, 2018

Mr. Bryce Bird, Director  
Utah Department of Environmental Quality  
Division of Air Quality  
195 North 1950 West  
P.O. Box 144820  
Salt Lake City, UT 84114-4820

RE: **Updated Notification of Compliance Status 40 CFR 63 SubPart UUUUU – Unit 2,  
Huntington Power Plant (Title V Permit #1501001004)**

Dear Mr. Bird:

Huntington Power Plant's Title V Permit Condition II.B.3.f.3 requires the Huntington Plant submit a Notification of Compliance Status according to the requirements of 40 CFR §63.9(h)(2)(ii); and, must contain all the information specified in 40 CFR §63.10030(e)(1) through (8), as applicable. Huntington Unit 2 recently received confirmation of the Low Emitting Electrical Generating Unit (LEE) status for particulate matter (PM). Therefore, this submittal is intended to update the initial notification with this new PM LEE information and satisfy this requirement.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information, or omitting statements and information, including the possibility of fine or imprisonment.

Should you have any questions regarding this information, please contact Richard Neilson, Huntington Power Plant Environmental Engineer at (435) 687-4334 or me at (435) 687-4211.

Sincerely,



Darrell Cunningham  
Managing Director Huntington Plant  
Responsible Official

Enclosure: Updated Notification of Compliance Status – Unit 2

cc: David Barnhisel, w/enclosure  
Steve Jensen, w/enclosure  
Sara Loiacono, EPA Region VIII

# Huntington Unit 2 Mercury and Air Toxics Standard 40 CFR Part 63 Subpart UUUU Updated Notification of Compliance Status

## Description of Affected Source 63.10030(e)(1)

Emission Unit ID	Emission Unit Name (design and manufacturer name)	Subcategory	Size: Rated Heat Input Capacity (mmBtu/hr)	Description of add-on controls	Fuels Used	Were the fuel(s) determined by PacificCorp or EPA through a petition process to be a non-waste under 40 CFR 241.3	Were the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3	Justification for the selection of fuel(s) burned during performance testing
Source Boiler Unit #2	Electric Utility Steam Generating Unit, bottom tangentially-fired, Babcock & Wilcox	Coal-fired unit not low rank virgin coal	4,960 MMBtu/hr	Pulse Jet Fabric Filter (baghouse)  Wet Flue Gas Desulfurization (wet scrubber)  LowNOx burner technology, w/ Separated overfire air	Bituminous Coal, #2 Fuel Oil	No	No	Bituminous coal is the primary fuel for the Unit and was burned during the performance tests. #2 Fuel Oil is used for startup fuel, when needed for start-up.

## Performance Test Summary 63.10030(e)(2)

Performance Test Parameter	Date of Performance Test	Method of Testing	Test Runs/Duration	Results of Performance Test	Emission Limit	Calculation formula	Sample Calculation
Mercury (Hg)	April 13, 2016 through May 15, 2016	Stack Testing using EPA Method 30B and ALT-091	Five dual trap test runs @ 144 hours each	0.02 lb/tBtu	1.2 lb/tBtu LEE limit 0.12 lb/tBtu	$E = \frac{Cd * Fe * (1 - Bws) * 100 * 10^{-6}}{\%CO2_{sw}}$ $(Eq. 19-9)$ <p>E = Average Hg Emission Rate lb/TBtu Cd = Average Hg Concentration from all traps lb/dscf Fe = Fuel Factor dscf/mmBtu Bws = Stack Gas Moisture Content (default) %/100 %CO2<sub>sw</sub> = Average Stack Gas CO2 Concentration (wet volume percent)</p>	$\frac{1.3E-12 * 1800 * (1 - 0.124) * 100 * 10^{-6}}{11.2}$ <p>= 0.02 lb/tBtu</p>
				0.9 lbs/year	Or Less than 29 lbs per year	$H_{max} = \frac{MHl * 8,760}{1,000,000 \text{ mm/T}}$ $E_{yr} = E * H_{max}$ <p>E = Average Hg Emission Rate lb/TBtu H<sub>max</sub> = Maximum Annual Heat Input of the Unit TBtu/yr MHl = Maximum Heat Input of the Unit mmBtu/hr E<sub>yr</sub> = Average Hg Emission Rate lb/yr</p>	$\frac{5,733 * 8,760}{1,000,000}$ <p>= 50.2 TBtu/yr</p> <p>0.0180 * 50 = 0.9 lbs/yr</p>
Filterable Particulate Matter (PM)	Quarter 2 2015 through quarter 1 2018	Stack Test using EPA Reference Methods 1, 2, 3B, 4, 5, 19	3 runs @ 2 hours per run for each quarterly run	0.006 lb/mmBtu Average PM emission rate over three year period	0.030 lb/mmBtu LEE limit 0.15 lb/mmBtu	$E \text{ lb/mmBtu} = \frac{Cs * Fc * 100}{CO2\%vd}$	$\frac{4.49E-07 * 1800 * 100}{(12.5)}$ <p>= 0.006 lb/mmBtu (Sample Calculation of quarter 2 2015 Run 1)</p>
Sulfur Dioxide (SO <sub>2</sub> )	April 16, 2015 through May 15, 2015	SO <sub>2</sub> CEMS	30 boiler operating day rolling average	0.082 lb/mmBtu	0.20 lb/mmBtu	$= \frac{\sum_{i=1}^n Her_i}{n} \text{ (Eq. 8)}$ <p>Her<sub>i</sub> is the hourly emissions rate for hour i and n is the number of hourly emissions rate values collected over 30 boiler operating days.</p>	$\frac{59,365}{720}$ <p>= 0.082 lb/mmBtu</p>

Quarterly PM tests have been conducted indicating continued compliance to the emission limit. No fuel analyses were required and no operating limits were established.

**Identification of Compliance Demonstration 63.10030(e)(3)**

<b>Pollutant</b>	<b>Method of Demonstration</b>
Mercury	LEE Annual Method 30B 30 day Test
Filterable Particulate Matter	LEE Stack Tests every thirty six months using EPA Reference Methods 1, 2, 3B, 4, 5, 19
Sulfur Dioxide	SO <sub>2</sub> CEMS

**Emissions Averaging 63.10030(e)(4)**

Emissions averaging will not be used to demonstrate compliance with applicable emission limits

**Work Practice Standards 63.10030(e)(5)**

Date Boiler Tune Up was Conducted	CMS in service during startup	Clean Fuel Used During Startup
Initial Tune Up October 20, 2013	CMS in service during all phases of operation except during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments)	#2 Fuel Oil Used for Startup Fuel
Subsequent Tune Up December 18, 2015		
Subsequent Tune Up May 8, 2017		

**Deviations 63.10030(e)(6)**

No deviations occurred from any emission limit or work practice standard.

**Additional Information 63.10030(e)(7)**



Initial Hg LEE Method 30B testing occurred from April 13 to May 15, 2016 with a result of 0.02 lb/TBtu average emission rate and a potential of 0.9 lb/yr. Subsequent annual test was performed April 11 to May 22, 2017 with a result of 0.01 lb/TBtu average emission rate and a potential of 0.4 lb/yr.

Initial PM LEE quarterly testing results summary

Test ID	Test Date	Average PM (lb/mmBtu)	LEE Threshold
Q2 2015	5/13-14/2015	0.007	0.015 lb/mmBtu
Q3 2015	8/12/2015	0.007	
Q4 2015	12/16/2015	0.008	
Q1 2016	2/10/2016	0.005	
Q2 2016	5/10/2016	0.007	
Q3 2016	8/24/2016	0.002	
Q4 2016	11/9/2016	0.003	
Q1 2017	2/8/2017	0.006	
Q2 2017	5/9/2017	0.003	
Q3 2017	9/19/2017	0.008	
Q4 2017	12/6/2017	0.005	
Q1 2018	2/7/2018	0.005	
36 month Average		0.006	

Identification of Startup Definition 63.10030(e)(8)

The affected source will rely on paragraph (1) for the definition of startup.

**Certification Statements 63.10030(e)(5) and 63.10030(e)(7)(ii)**

I certify that all applicable emissions limits and work practice standards were met. This EGU complies with the requirements in §63.10021(a) to demonstrate continuous compliance. No secondary materials that are solid waste were combusted in any affected unit.



Darrell J. Cunningham  
Plant Managing Director and Responsible Official